

PROFESSIONAL QUALITY FASTENERS Tel: (805) 339-2200 Fax: (805) 650-0742 www.arp-bolts.com

INSTALLATION METHOD FOR HEAD STUD KITS Part Number: 151-4301 Application: Ford EcoBoost 2.3L HSK

- 1. Inspect all hardware prior to installation. Look for obvious defects or shipping damages. Please call 800-826-3045 with any questions or issues.
- 2. To ensure proper thread engagement and accurate torque readings, clean all threads in the block. Chase if necessary with ARP Thread Chaser, part number <u>912-0002 (M10 X 1.25)</u>
- 3. Clean the spot faces on the cylinder head where the washer seats, use of solvent or brake/carb cleaner is recommended.
- 4. Install the head gasket and cylinder head.
- 5. Screw the studs into the block, do not apply torque. The hex broach in the end of the stud is designed to assist with installing/removing the studs from the block, not for applying torque.
- 6. Then, using a clean, dry rag remove all oil from both sides of each washer. The cylinder head and washer mating surfaces must be free of oil/grease/lubricant. Failure to keep these surfaces dry may result in inconsistent preloads.
- 7. Place the washers over the studs and on to the **dry**, **clean spot faces** of the cylinder head.
- 8. Lubricate the stud threads and bottom of the nuts with ARP Ultra-Torque Fastener Assembly Lubricant. Then install the nuts onto the studs and tighten hand tight.

TORQUE PROCEDURE

- 9. Following the manufacturers recommended torque sequence, shown below, use a **12mm** socket to torque the nuts per steps 1-7
 - 1- Tighten nuts 1 through 10 to 25 ft-lbs
 - 2- Tighten nuts 1 through 10 to 50 ft-lbs
 - 3- Tighten nuts 1 through 10 to
 - 4- Loosen nuts 10 through 1
 - 5- Tighten nuts 1 through 10 to
 - 6- Tighten nuts 1 through 10 to
 - 7- Tighten nuts 1 through 10 to

Torque Sequence

75 ft-lbs

25 ft-lbs

50 ft-lbs

75 ft-lbs

